

State Air Pollution Control Board
629 East Main Street, P.O. Box 1105, Richmond, VA 23218.

May 4, 2007

Att: [Ms. Monica Harvey](#)

Regarding: Comments concerning Draft Consent Order/Draft Order for the Mirant
Potomac River Generating Station.

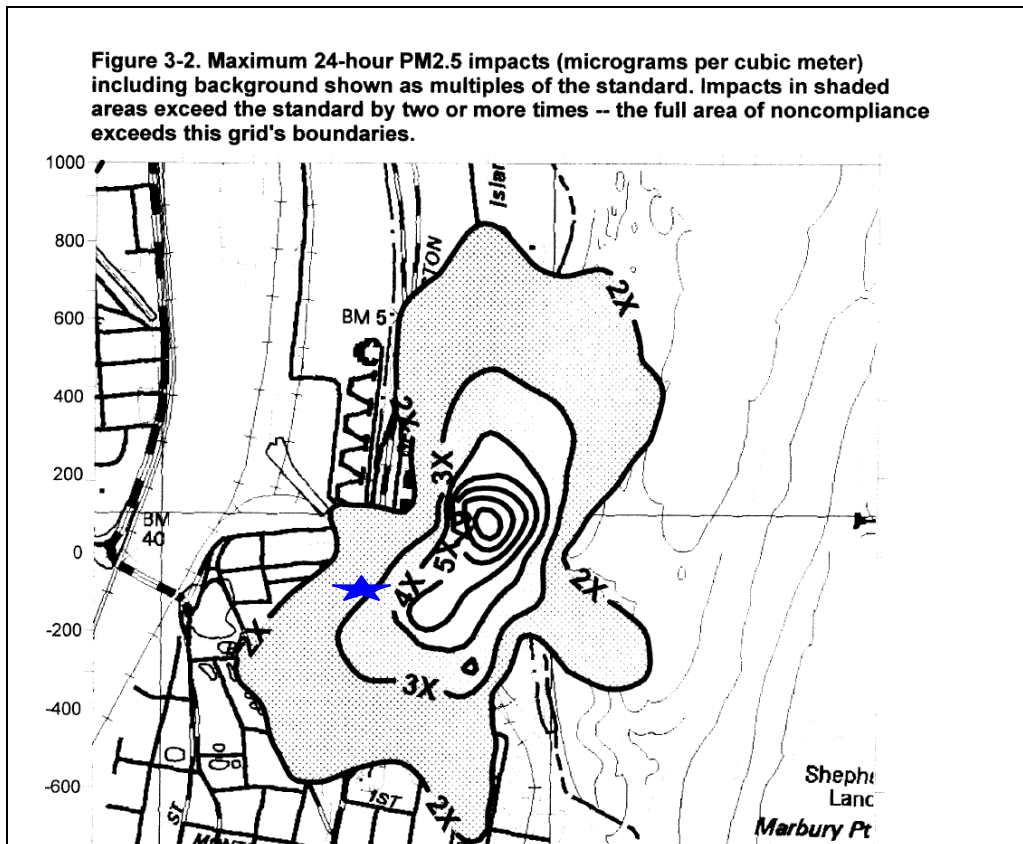
Dear Mr. Chairman and members of the State Air Pollution Control Board

Please find enclosed our comments and concerns.

Sincerely

Connie Graham and
Poul Hertel
1217 Michigan Court
Alexandria Va., 22414

We live on 1217 Michigan Court situated within ¼ mile of the plant, and according to both the Mirant and City of Alexandria studies, we are impacted by the downwash effects of the Potomac River Generating Plant (see blue star in the Aero Engineering Report page 3-6).



Although we show the Pm 2.5 effect, the report shows that both NO_x and So₂ exceedences affect us as well.

The EPA Administrative Consent Order purportedly, helps to ensure that our health is protected, but we have grave doubts, that frankly, apply to the DEQ proposed consent proposal as well.

The health effects of the potential exposure are well documented and, unfortunately consistent with our own experience. We moved in to the neighborhood in 1993, and on July 4 1999 and July 4 2000 one of us was identified as having severe atrial fibrillations that resulted in hospitalizations and eventually needing a pacemaker. Pacemakers, aside from the obvious benefits, also keeps a running tally of the heart. At the last reading of the data covering the past six months, the following events were recorded. On March 9, 2007, the data showed that as the pacemaker recipient left the house, the heart went into an uncontrolled ventricle activity (ventricular tachycardia) This dissipated when leaving

the area for work, and, this is important, restarted at the end of the day when the residential area was re-entered.

The salient point is that the ACO and the DEQ proposal relies on predictive modeling based on the **expected** weather forecast. To buttress the unreliable nature of the weather forecast, the DEQ proposal relies on measuring stations at Mariana Towers. But what about us? Do we not deserve protection? Is that not why the EPA has a modeling protocol to ensuring protection for all?

The monitors have been put in place in locations that do not capture residents south of the plant. Although, Marina Towers is expected to receive the highest effects, it is an expected average. If the conditions are right, the monitors in place can show things are fine, even though the wind is blowing the downwash into our house. Is this what happened on March 9¹? As we do not have a monitor, and the EPA has decided to abandon the customary modeling protocol governing such pollution sources, we have no way to know, and neither do you. How many modeled exceedences have taken place in areas not covered by monitors?

For this very reason, we respectfully, urge you to side with our health, and decide to implement the City of Alexandria proposal.

Sincerely

Mr. and Mrs. Poul Hertel

1217 Michigan Court

¹ See Environ Health Perspectives. 2005 June; 113(6): 670–674.
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1257589>

Association of Air Pollution with Increased Incidence of Ventricular Tachyarrhythmias Recorded by Implanted Cardioverter Defibrillators.

“We found increased risks of ventricular arrhythmias associated with 2-day mean exposure for all air pollutants considered, although these associations were not statistically significant. We found statistically significant associations between air pollution and ventricular arrhythmias for episodes within 3 days of a previous arrhythmia. The associations of ventricular tachyarrhythmias with fine particle mass, carbon monoxide, nitrogen dioxide, and black carbon suggest a link with motor vehicle pollutants. The associations with sulfate suggest a link with stationary fossil fuel combustion sources.”

1. The Issuance of a Permit is Much Preferred to Any Order

Along with the two draft orders, the DEQ has also proposed three permitting options as part of this notice for public comments. The City prefers that a permit be issued to the Potomac River Generating Station (PRGS) instead of an order or a consent order. The three permitting options contain pre-established emission limits that are more prescriptive and provide greater medium-term certainty of compliance with SO₂ National Ambient Air Quality Standards (NAAQS).

The City has always supported the issuance of a comprehensive State Operating Permit (SOP) that addresses compliance with NAAQS for all pollutants. The three proposed permitting options, while only addressing SO₂ in the interim period, advance the goal of eventually establishing comprehensive emission limits in an SOP.

2. Of the Two Orders, the City's Draft Order is More Protective of Public Health

As we discussed during the consent order negotiations, the City does not believe that the EPA's Administrative Consent Order (ACO) is adequately protective of NAAQS. Furthermore, the ACO allows operation of the PRGS in an unorthodox manner using techniques that are prohibited by federal and state regulations, i.e., use of daily predictive modeling and ambient monitoring to establish daily operational levels for the PRGS. Under such techniques, the plant's operations are increased when favorable weather is forecasted and only reduced when limited ambient monitoring indicates a possible non-compliance situation. The goal of using these techniques is to increase emissions and reduce the use of Trona, the SO₂ control method, on any given day to the maximum extent possible. The proposed Draft Consent Order between DEQ and Mirant continues the use of these techniques to maximize emissions and reduce Trona usage on a daily basis. Because of the high SO₂ emission limits allowed by the Draft Consent Order, the City does not believe that this order provides adequate confidence that NAAQS will be protected.

The City's proposed Draft Order in contrast specifies lower SO₂ emission limits that are based on limited routine modeling and allow for operational flexibility by providing an adequate margin of compliance. While the City's proposed order allows the use of predictive modeling and ambient monitoring, we agreed to these techniques as concessions in return for lower emission limits that provide adequate confidence regarding NAAQS compliance. Although the City does not believe that the emission limits we proposed in our order could demonstrate compliance under all weather and operational scenarios, in the interest of reaching a mutual consent we agreed to a level of emissions that, when used in combination with predictive modeling, would reasonably ensure NAAQS compliance. We proposed this order with the understanding that it would be limited to a short period of time, i.e., no more than three or four months, and that a permit with prescriptive emission limits would be issued prior to its expiration. We prefer our proposed Draft Order over DEQ/Mirant's proposed Draft Consent Order

because it strikes a balance between a reasonable compliance margin for Mirant and a reasonable assurance of air quality compliance.

3. Any Order Must Be for a Short and Defined Duration

The Draft Consent Order proposed by DEQ allows PRGS' operations under the order to continue for an extended period of time, i.e., as much as two to three years. This period of time is even longer than the 12 months allowed by EPA's ACO. Allowing the consent order to last two to three years is counter-productive to the goal of issuing a comprehensive SOP. It is our understanding that the primary purpose of any consent order is to address operations during the month of June 2007 when EPA's ACO would have expired while the two new 230 kV transmission lines would not yet be in service. The secondary purpose of any consent order is to allow DEQ adequate time to prepare a permit. Therefore, the City prefers a short-term option, i.e., no more than three to four months to both allow PRGS to operate under a regulatory regime after EPA's ACO expires on June 1, 2007, and allow DEQ adequate time to issue a prescriptive permit.

4. Any Order Should not Condone a Model Evaluation Study

The City believes that a consent order is neither necessary, nor it should condone, the performance of a model evaluation study (MES). While EPA's modeling guidelines allow Mirant to perform such a study, the consent order should not be used as a vehicle to allow such an analysis. The MES only serves to prolong the duration of the consent order and delay the issuance of a comprehensive SOP. If Mirant wishes to pursue the MES, it should do so under a separate protocol, review and approval process that must not affect the expeditious issuance of a consent order and/or an SOP.

The City has previously expressed concerns with the nature and extent of the MES as proposed by Mirant, and as allowed by the Draft Consent Order. Should Mirant pursue the MES, it must address concerns previously raised by the City. Any review and approval process adopted by DEQ for the MES protocol must allow an opportunity for the City and the community to comment.

5. The Order Should not Allow Credit for Stack Merger

The stack merger, as proposed by Mirant, is a prohibited dispersion technique under federal and state regulations. While EPA is currently evaluating this issue and has not made a determination, the proposed Draft Consent Order appears to allow the proposed stack merge project to proceed by allowing dispersion credit from that project. Given that Mirant's proposed schedule for implementing the stack merge is Fall 2007 or later, this provision serves to both delay the issuance of a permit and establish high emission limits prohibited by law.

6. The Draft Consent Order is not Protective of Health-based Short-term SO₂ Guideline

The SO₂ emission limits in the Draft Consent Order are too high to be protective of the SO₂ five-minute health-based guideline. While Mirant is currently collecting ambient monitoring data, it does not record five-minute readings. Furthermore, while Mirant uses the ambient data to reduce operations when impacts approach the NAAQS compliance levels, the trigger level used in this procedure is set too high to be protective of the five-minute guideline. The City's Draft Order has proposed both the recording and sharing of five-minute SO₂ data, as well as a lower trigger level at which operations must be reduced.

7. The Draft Consent Order Allows Excessive NO_x Emissions

The DEQ's proposed Draft Consent Order allows an excessive level of NO_x emissions during the ozone season that will further exacerbate air quality problems in Alexandria and the metropolitan Washington area. The ozone season limit of 1,600 tons will contribute to continuing ozone and fine particulate matter (PM-2.5) problems. Furthermore, the annual NO_x limit of 3,700 tons contained in the Draft Consent Order has been shown via dispersion modeling to violate the NAAQS. The City believes more stringent NO_x limits for PRGS are necessary to protect the ambient air quality in the City and the region. The City's proposed Draft Order specifies an ozone season NO_x limit of 1,019 tons which is the same as the limit DEQ specified in its draft operating permit in 2004. While the City's Draft Order maintains the annual NO_x limit of 3,700 tons, we believe the SO₂ limit in the City's proposed order will be more restrictive for PRGS and will serve to reduce NO_x emissions below 3,700 tons.

8. Any Order Must Require Trona Information to be Collected and Reported

The City has raised concerns on numerous occasions regarding the potential for adverse health affects related to use and disposal of Trona. To date, no health studies have been published regarding exposure to this compound. The Virginia Department of Health (DOH) is currently pursuing such a study. In the mean time, it is essential that Mirant collect and maintain data on the quantity of Trona used on an hourly basis for each boiler and provide these records to the City, DEQ and DOH for review. Furthermore, the order must require Mirant to perform a post-Trona the fly ash analysis to including particle size distribution, elemental analysis, pH, corrosivity and leachability, and report these data to the City, DEQ and DOH for review and analysis. In the absence of such data, it is premature for Mirant and DEQ to claim that Trona is "non-hazardous" and that it forms a "safe non-corrosive product."